# APPENDIX C

# CAPITAL FACILITIES & UTILITIES PROFILE

This profile describes the current conditions and capacities of key public facilities and private utilities. The inventory represents the conditions and levels of service (LOS) for county-wide public facilities service delivery to existing residents and the anticipated additional facilities that will be needed to accommodate the forecasted 20-year growth. The GMA also requires the Comprehensive Plan to describe locations, capacities, and need for utilities including private natural gas, telecommunications, electric utilities; and public solid waste, sewer, water, and surface water utilities. The information relating to utility service providers contained here is a summary. More detailed discussions of the topics covered in this chapter are found under separate cover in utility service provider capital functional plans.

The following parts of this section include the existing inventory of County-owned and operated public facilities. These include:

- administrative offices;
- criminal justice;
- maintenance and storage facilities (shops);
- senior centers; and
- parks and recreation.

A description and analysis of facilities inventories and levels of service for transportation facilities are included in the Transportation Element. Water, sewer, and solid waste facilities are contained in the Utilities Element.

Other major public facilities and services provided by other municipal or special districts or entities are excluded from detailed inventory here even though their services may have an important role in regional land use and capital facility decisions. These facilities are subject to detailed evaluation in their respective master plans and special studies.

Additionally, the County and cities have interlocal agreements regarding provision of facilities and services within the respective UGAs per the Countywide Planning Policies. The cities are responsible for providing capital facility inventories, levels of service standards, forecasts of future needs, and financing plans in their respective plans.

Each city and town in Lewis County has adopted a comprehensive plan for its city limits and the associated portion of the Urban Growth Area designated by the Board of County Commissioners. Each city plan must also have a Capital Facilities Element and

establish LOS for transportation and other facilities the city determines to be subject to GMA concurrency requirements.

This element does address regionally significant capital facilities and services such as emergency facilities and schools because they are an important part of the overall fabric of community growth and change. Lewis County and the Cities of Toledo, Winlock and Vader are considering the establishment of a regional utility system, but implementation is not expected until 2011.

# **COUNTY-OWNED CAPITAL FACILITIES**

Information on existing conditions contained in this section was taken from the *Lewis County Department of Public Services Capital Facilities Planning Volumes 1 and 2,* November 1997. This document is incorporated into the Lewis County Comprehensive Plan by reference. The reader is directed to this document for additional detailed information regarding specific County-owned capital facilities.

#### **COUNTY-OWNED BUILDINGS**

The inventory of County-Owned Buildings totals approximately 611,456 square feet and includes six categories of facilities summarized in Table 8.1 below.

Table 8.1: Inventory of County-Owned Buildings

| FACILITY CATEGORY   | CAPACITY<br>(Square Feet) |  |
|---|---------------------------|--|
| <b>General Government</b> : Historic Courthouse, Health Services Building, Public Services Building   | 169,000                   |  |
| <b>Senior Centers:</b> Twin City-Senior Center, Morton, Packwood, Winlock, Toledo   | 25,890                    |  |
| <b>Shops:</b> Big Hanaford Shop, Adna Bunker Shop, Pleasant<br>Valley Shop, Sheriff's Storage Building, Ethel Shop, Kiona<br>Shop, Central Shop, Vegetation Control Shop, Traffic Control<br>Shop, Animal Shelter, Motor Pool, Packwood Airport, Parks<br>Shop                  | 113,062                   |  |
| Parks and Shelters: Mayfield Office, Mayfield Restroom,<br>Glenoma County Park Shelter and Restroom, Schaefer County<br>Park Shelter and Restroom, Rose Park Shelter and Restroom,<br>South County Park Shelter and Restroom, Back County<br>Memorial Park Shelter and Restroom | 12,504                    |  |
| Rental Property: Credit Union Building, Historical Museum,<br>Work Opportunity, Claquato Church   | 70,000                    |  |

| FACILITY CATEGORY  | CAPACITY<br>(Square Feet) |
|--|---------------------------|
| Criminal Justice: Lewis County Jail, Youth Services Center,<br>Coroner/Evidence Building, The Law & Justice Center,<br>Congregate Residence Facility (Second Floor Annex)          | 221,000                   |
| Public Works Facilities: New Facilities Building, SW Washington Fairgrounds Building, Central Transfer Station, East Lewis County Transfer Station, and Vader Water Treatment Plan |                           |
| TOTAL  | 611,456                   |

#### **LEVEL OF SERVICE**

The Level of Service represents a standard or unit of measure which the County can use to assess its ability to meet public service needs. Current administrative space ranges from 86 square feet per employee to over 300 square feet per employee, depending upon the facility provided and the number of employees housed. For administrative office space, the range is 176 - 251 square feet per full-time equivalent employee. The County anticipates an average employee need of 4.5 employees per 1,000 population. Space needs are often a tradeoff depending upon support and information service needs and capability. The County adopts the current range of space allocation as the appropriate LOS, with a goal to increase efficiency through increased space, support, or information technology as appropriate.

Table 8.2 County Administrative Offices – Projected Space Needs

| Year                                      | 1998      | 2005                | 2030                |
|---|-----------|---------------------|---------------------|
| Population                                | 68,370    | 76,004              | 99,746              |
| # of FTE per 4.5/1 ,000                   |           |                     |                     |
| pop.                                      | 306       | 340                 | 448                 |
| Square Feet Available                     | 53,993    | 87,993 <sup>3</sup> | 87,993 <sup>3</sup> |
| Administrative Office needed @ 176 SF/FTE | 53,993    | 59,840              | 78,848              |
| Administrative Office needed @ 251 SF/FTE | 76,806    | 85,340              | 112,448             |
| Alternative Range                         | 0/-22,813 | +28,153/+2,653      | +24,445/-           |
|   | sf        | sf                  | 9,145 sf            |

This number includes the addition of 20,000 square feet in the Severns Building, and 14,000 square feet in two floors of the Annex Addition.

As Table 8.2 illustrates, there is adequate administrative office space to meet the space needs through the year 2030 at the current LOS of 176 sf/fte. If Lewis County targets the

recommended higher LOS of 251 SF/FTE, then the result is a deficiency of 22,813 square feet today. In the future, the County will weigh tradeoffs between space needs and increased productivity and information services to assure optimum service. Each five years the County will review space needs and allocations to assure that County facilities efficiently provide necessary public services.

# FIRE PROTECTION

There are 18 fire protection districts in Lewis County that are staffed by volunteer personnel. The City of Chehalis has its own fire department and full time personnel. The recently created Riverside Fire Authority is a combination of the former Centralia Fire Department and Lewis County Fire District #12, and includes full-time professional as well as volunteer firefighters. The following sections provide summary information for the volunteer fire districts:

Fire protection is fairly continuous in the western half of the county. The eastern half of the county has fire protection coverage along the major state highway corridors. The remainder of the county is largely federal forest land, outside the immediate service of local agencies, although mutual service agreements can enable local providers to respond to incidents on federal lands. Planning, development, and financing of capital facilities necessary for the provision of rural fire and emergency services by state law are the responsibility of the fire districts described below.

#### FIRE DISTRICT #5

The district currently consists of four stations and an administrative building. Station 51 has four truck bays, Station 52 has five bays and Stations 53 and 54 have three truck bays each. Station 53 also has a medic trailer. The administrative building includes two meeting rooms and a small kitchen.

Within the next five years, the district expects to relocate Station 51, collocating with district administration. Looking 10 to 15 years out, capital facilities plans may also include the relocation of Station 52.

### FIRE DISTRICT #8

The district currently has five stations located in the Salkum, Ethel, Silver Creek, and Winston Creek areas. Strong growth and anticipated expansion of industrial facilities in the Ethel area indicate the need for a major upgrade of that station while an additional substation in the district is expected to be needed. The main station at Salkum may require upgrading in order to support new technologies. Location of the proposed station and funding for the above projects has not yet been determined.

The following Lewis County fire districts have not provided information about their existing capital facilities or future plans:

LCFD 1 – Onalaska 98570; LCFD 2 – Toledo 98591; LCFD 3 – Mossyrock 98564; LCFD 4 – Morton 98356; LCFD 6 – Chehalis 98532; LCFD 7 – Vader; LCFD 9 – Mineral 98355; LCFD 10 – Packwood 98361; LCFD 11 – Pe Ell 98572; LCFD 13 – Boistfort/Curtis 98538; LCFD – 14 Randle 98377; LCFD 15 – Winlock 98596; LCFD 16 – Doty/Dryad/Meskill; LCFD 17 – Ashford/Elbe 98304; and LCFD 18 – Glenoma 98336

# **PUBLIC SCHOOLS**

The following fourteen school districts serve Lewis County:

Adna Boistfort Castle Rock
Centralia Chehalis Evaline
Morton Mossyrock Napavine
Onalaska Pe Ell Toledo

Winlock White Pass

School districts with capital facilities plans that are adopted by County resolution are incorporated by reference in the Comprehensive Plan and can be found on the County Comprehensive Plan website. School districts without adopted capital facilities plans are summerized below:

### **DISTRICT SUMMARIES**

### Mossyrock School District #206

The Mossyrock School District accommodates 643 total students that are comprised of 329 elementary students, 98 middle school students and 216 high school students. Planned capital improvements costing approximately \$4.95 million scheduled to be completed by 2010 include:

- Modernizing the 48 year old high school gymnasium
- Building a new elementary PE classroom/multipurpose room
- HVAC for the high school and vocational classrooms
- Two new classrooms
- New football grandstand replacing the existing structure
- Renovating & modernizing the 6<sup>th</sup> grade restrooms
- Remodeling and updating the kitchen
- Additional technology
- Roof structure for the vocational building

#### **EVALINE SCHOOL DISTRICT #36**

The Evaline School District consists of only one elementary school located three miles north of Winlock. In 2010, Evaline Elementary served an average of 38 fulltime equivalent students. The Evaline School District does not have a Capital Facilities Plan.

#### CASTLE ROCK SCHOOL DISTRICT #401C

The Vader Elementary School closed in 2007. Now the Vader area is served by the Castle Rock School District in Cowlitz County. Castle Rock is located 10 miles south of Vader. The Castle Rock School District serves more than 1,300 students in three schools: an elementary school, a middle school, and a high school.

## **OTHER SCHOOL DISTRICTS**

The following school districts have not provided information about their enrollments, existing capital facilities or future plans:

Adna #226, Boistfort #234, Morton #214, Pe Ell #301 and White Pass #303.

### **SCHOOL IMPACT FEES**

Many school districts have identified the need to institute school impact fees to offset the cost of providing additional classrooms to accommodate projected growth. Districts are working with Lewis County to draft a school impact fee program.

# **AIR TRANSPORTATION**

#### CHEHALIS-CENTRALIA AIRPORT

Although the Chehalis-Centralia Airport property lies entirely within the City of Chehalis, the airport is governed by the Chehalis-Centralia Airport Governing Board, consisting of representatives from Lewis County, the City of Chehalis and the City of Centralia.

The 2001 Master Plan identified a number of short term (0-5 years), intermediate term (6-10 years) and long term (10-20 years) as part of its capital improvement program. The total cost of the capital improvement program was estimated at approximately \$12,375,400. Possible funding sources were also identified which included:

- Federal Air 21 Program
- FAA Facilities and Equipment Program
- State Funds AIP Matching Grants
- Washington Local Airport Aid Program
- Local Funding.

### **ED CARLSON MEMORIAL FIELD**

The Ed Carlson Memorial Field is located three miles northeast of Toledo and is owned by Lewis County. Activities at the airport are governed by a five-member Advisory Board

and a System Manager that acts as a liaison between the advisory board and the County Commissioners.

The airport completed an update to its Master Plan in 2003. There have been several improvements at the airport since 2003. The 5,000 foot-long, 150 foot-wide runway was repaved and new airport lighting and drainage systems were installed, with a total project cost of \$1.3 million. Security cameras were installed during the past year. The airport is currently spending \$460,000 to rehabilitate its parking ramps. Future projects include spending \$96,000 to survey for and install instrument approach devices, rehabilitation of the taxiways, and development of 14 acres of vacant land for use as for-lease aircraft hangars.

### PACKWOOD AIRPORT

The Packwood Airport is located within the unincorporated town of Packwood and is owned by Lewis County. Activities at the airport are governed by a five-member Advisory Board and a System Manager that acts as a liaison between the advisory board and the County Commissioners.

The airport's Master Plan is currently being reviewed by the Federal Aviation Administration. The Master Plan must be approved before any capital projects are commenced. Planned projects include a \$600,000 runway extension and widening, which would allow larger planes to use the airport. New security cameras were recently installed. The airport also plans to improve the lighting and drainage systems. The airport is currently working with surrounding landowners to remove hazardous trees to enable safer landings and takeoffs.

### **COUNTY-OWNED AIRPORT CAPITAL FUNDING**

95 percent of funding for capital projects at Ed Carlson Memorial Field and Packwood Airport is paid for by the Federal Aviation Administration's Air 21 and Equipment and Facilities programs. 2.5 percent of the project costs are paid for by Lewis County, and the Washington State Department of Transportation provides a matching grant equivalent to what the County pays. The two federal programs allocate \$150,000 per airport per year for capital improvements at the two County-owned airports, which can be spent at either airport.

# WATER SUPPLY

### **CITY OF CENTRALIA**

The City's water system is described in a report titled City of Centralia Water System Plan Update (2005), a comprehensive plan for the City of Centralia, Washington. The report describes the existing water supply and distribution system as well as proposed

improvements necessary for serving customers within the City's municipal boundaries, designated Urban Growth Area (UGA) and water service area.

The City of Centralia water utility is a Class A water system serving approximately 7,300 customers. The average daily consumption is 2.44 MGD (2004) with the maximum daily production of 4.40 MGD. The system is made up of approximately 124 miles of water mains. The City's water source is groundwater from seven wells. The City also has surface water rights on the North Fork Newaukum River and five additional inactive wells.

In total, the City has water rights for 9,141 acre feet per year, with an instantaneous production rate of 10,033 gallons per minute (gpm). The City currently has just over 8.06 million gallons in water storage located in five reservoirs. Seven service zones are located throughout the City which relate to the various elevations and pressures.

The majority of anticipated growth in the water system is expected to occur outside of City Limits and within higher elevation pressure zones. As such, pump station upgrades and transmission main extensions are needed in areas such as Cooks Hill and Davis Hill to support future water demand growth. Proposed storage reservoirs on Davis Hill (250,000 gallons) and Widgeon Hill (300,000 gallons) will serve to meet needs in these potentially high growth areas.

#### **CITY OF CHEHALIS**

The City of Chehalis provides water service to the area within and south of the corporate limits. Existing water distribution facilities extend to the majority of the city and approximately 17 miles south of the corporate limits along Jackson Highway and the North Fork Road. The water system includes over 80 miles of water mains, approximately 3,000 services, and 320 fire hydrants. The average daily water consumption is 2.2 million gallons per day (MGD); the peak consumption is 3.8 MGD; and the current total capacity of the water treatment plant is 4.5 MGD. The City obtains water through two intakes, one on the North Fork of the Newaukum River with a capacity of 2.8 MGD, and the other on the Chehalis River with a capacity of 9.6 MGD.

### **CITY OF MORTON**

The City of Morton last updated its Water System Plan in 2001. The plan shows 1,769 afy from water rights from Connelly Creek and one groundwater well. The system serves 635 connections through 11.5 miles of water mains, and includes a 500,000-gallon reservoir and a water treatment plant.

The 2001 WSP indentifies \$2 million worth of improvements that were to be completed by 2005, including a new 500,000-gallon reservoir that would alleviate the city's 90,000-gallon storage deficit.

# CITY OF MOSSYROCK

The City of Mossyrock serves property within existing city limits and its UGA and beyond, for a total service population of nearly 1,000 people. The existing system includes two wells capable of pumping 350 gpm, three reservoirs with a total capacity of 407,000 gallons, 13 miles of water mains, and 358 connections. The system is currently operating at 49% of its 56.7 million gallon annual production. The city owns 289 acre feet per year of water rights.

The city anticipates a total of 735 connections in 2026, and has planned for slightly over \$1 million in improvements.

### CITY OF NAPAVINE

Napavine submitted a draft Water System Plan update in May 2008 that is currently being reviewed by the County and DOH. The proposed WSP shows that the existing system consists of four wells with a total capacity of 265 gallons per minute, for a total annual production of 40 million gallons. There are two storage reservoirs totaling 450,000 gallons that supply 607 connections through 11 miles of water mains. The city currently owns water rights totaling 168 acre feet per year. The existing service area, about 1 square mile in size, is mostly contained within the existing town plat; the proposed retail service area is approximately 12 square miles.

To meet demand for 2028, the city estimates it will need 907 acre feet per year of water rights, and has aggressively been seeking new water rights and transfers of existing rights. The city's capital facilities plan shows approximately \$8.4 million of new water-related improvements, including \$6 million for upgrades and expansions of water mains.

#### CITY OF PE ELL

Pe Ell completed a Water System Plan update in 2005. The updated plan shows that the city currently serves 371 connections with an average daily consumption of 69,000 gpd, with an annual consumption of 54.6 million gallons. Average daily and annual production is 142,530 gpd and 52 million gallons per year, respectively. There are two water storage facilities: a 500,000 gallon reservoir and a new 190,000 gallon reservoir completed in 2003. The city currently utilizes surface water rights from Lester Creek and the Chehalis River totaling 144 acre feet per year. The city anticipates an increase of 119 connections by 2025, and has planned a \$1.2 million capital improvement program, consisting primarily of water main extension and replacement.

## CITY OF TOLEDO

The City of Toledo provides water service mainly within the city's existing footprint. According to the city's 2006 draft Water System Plan update, which is currently being reviewed by the Washington State Department of Health (DOH), the system includes

nearly 7 miles of water mains, 2 wells, and a 250,000-gallon reservoir serving a total of 328 connections. The city currently owns 144 acre feet of water rights per year, and applied for an additional 323 acre feet per year in 1995. Average daily consumption is approximately 70,100 gallons, while annual consumption is approximately 25.2 million gallons per year. The city anticipates an average daily consumption of 87,000 gpd in 2026, and has planned \$3.5 million worth of improvements, including a third well, a new reservoir, and various repairs, upgrades and replacements.

### **CITY OF VADER**

The City of Vader water system was transferred to Lewis County through the court receivership process on October 29, 2010. The system had to deal with several water outages, line breaks, and boil water advisories since 2006. The City lacked the financial means to effectively deal with system inadequacies, and began meeting with the State Department of Health (WSDOH) and Lewis County in late 2009 to explore options. The most viable solution was for WSDOH to file a court petition to appoint Lewis County receiver of the water system.

Although Lewis County owns the system, the name of the system remains the same for ease of historical reference and permitting.

Information on the Vader water system is from the City of Vader Comprehensive Water System Plan, Amendment, September 2010 and City of Vader Comprehensive Water System Plan, May 2008. These documents are incorporated into the Lewis County Comprehensive Plan by reference. WSDOH requires these plans per WAC 246-290 for operation of a Group A water system with some of the following requirements: capital improvement program with a list of projects for implementation in the first six-year period (through 2015) and in a 20-year period (through 2025); and updates at every six years or shorter to reflect current conditions of the system.

The service area of the City of Vader water system includes two water systems: the city's and that owned by the Enchanted Valley Country Club (EVCC), which is in the UGA. There are a total of 369 connections, including 99 in EVCC. The water source is the Cowlitz River, with a maximum intake flow of 224 gallons per minute. The system contains surface water treatment plant, intake pumps and facility, 250,000 gallon steel reservoir, and 8.8 miles of pipes with an average daily demand of 95,000 gpd or 106 afy. The capital improvement program for Vader plans \$3.3 million of projects through 2025. Lewis County plans about \$1.3 million of several capital improvement projects in 2010 with construction to begin by 2012.

### CITY OF WINLOCK

Winlock's draft Water System Plan is dated October 2007, and is still undergoing DOH review. The existing system has four wells, three reservoirs totaling 1.1 million gallons, and 485 acre feet per year of water rights. The city expects high population and

commercial growth, which would increase the average daily demand from 350,000 gpd in 2007 to 967,000 gpd in 2027. Approximately \$14.1 million worth of capital improvement projects have been planned through 2013.

The following districts are responsible for planning, development and financing of capital facilities necessary for services provided according to state law and rules of the state departments of Ecology and Health.

#### LEWIS COUNTY WATER-SEWER DISTRICT NO. 1 - RANDLE

Lewis County Water-Sewer District #1 provides water service in the Randle area. The water system plan was amended in June 2006.

# LEWIS COUNTY WATER-SEWER DISTRICT No. 2 - ONALASKA

Lewis County Water District #2 provides water service in the Onalaska area. The district does not have a current water plan; however, its 1993 water plan shows an average daily production of 61,600 gpd with service provided to 210 equivalent residential units.

# LEWIS COUNTY WATER-SEWER DISTRICT No. 3 - PACKWOOD

The Packwood area is served by Lewis County Water District #3 and the High Valley Park Water Supply System. Lewis County Water District #3 serves the Packwood townsite and currently has 330 active hook-up accounts. There is a long term plan to build a new 220,000 gallon water tower. The High Valley Park Water Supply System serves 891 water service hook-ups, of which approximately 231 are permanent residences. The water system is served by two wells.

### LEWIS COUNTY WATER-SEWER DISTRICT No. 5 — BIRCHFIELD

The water district serves existing and future lots within the proposed Birchfield Fully Contained Community.

### LEWIS COUNTY WATER-SEWER DISTRICT No. 6 - LAKE MAYFIELD

The Mayfield Village area is served by Lewis County Water and Sewer District #6. The system currently has 270 account hook-ups; 62 of which are permanent residences, 114 part-time residences, 85 unused, and 9 commercial.

# **BOISTFORT VALLEY WATER**

Boistfort Valley Water is a community, non-profit water distribution system, currently serving 788 residences, 6 dairies, 2 public school systems, and 15 assorted small businesses. The distribution system consists of approximately 50 miles of pipeline serving an area of 25 square miles. There are three sources of supply, two water

treatment plants, 5 pressure zones with 7 pumping stations, and 7 reservoirs with a total storage capacity of 1.3 million gallons. At this time, BVW is not planning on extending or expanding service into any new areas. The existing population served is approximately 2,500 people.

Due to extensive damage which occurred during the flood of December 2007, the water system is currently in a state of flux as ongoing repairs continue to be funded by FEMA and USDA Rural Development. After this work is completed and evaluated, a long term comprehensive plan will be developed as required by the Washington State Department of Health.

### **THURSTON PUD NO. 1**

Thurston PUD No. 1 is a municipal corporation that functions as both owner/operator and a satellite Management Agency in Lewis County. Currently, Thurston PUD operates approximately 46 small systems in the County serving 262 customers.

# SANITARY SEWER

#### CITY OF CENTRALIA

The City's sewer or wastewater system is described in a report titled <u>General Sewer Plan</u> (2000) a comprehensive plan for the City of Centralia, Washington. The report describes the existing sewer collection, conveyance and treatment system as well as proposed improvements necessary for serving customers within the City's municipal boundaries and its designated Urban Growth Area (UGA).

### **WASTEWATER TREATMENT PLANT**

The City's new wastewater treatment plant is located northwest of the City's UGA boundary adjacent to the Chehalis River and provides primary and secondary treatment for the City. The wastewater processing units consist of a headworks, aeration basins, clarifiers, UV disinfection, and a plant effluent outfall. Solids processing includes grit removal, dewatering, lime stabilization, heat pasteurization and land application of the resulting Class A extraordinary quality biosolids on the City-owned farm property where hay and occasionally other crops are grown.

The City sewer service area is divided into 28 sewer drainage basins within the City limits and the UGA. This is the area in which the City currently provides sewer service or is planning to provide service to customers. Outside the UGA, in cases where local soil conditions make it difficult to treat sewage with septic systems and there are documented human health risks from failing septic systems, the City and County have worked together to extend sewer to those existing homes with failing septic systems.

### **COLLECTION SYSTEM**

The City's sewer collection system contains over 65 miles of gravity pipelines ranging in diameter from 6-inches to 30-inches.

#### **PUMP STATIONS**

The sewer system includes 24 pump stations, located in 8 of the 28 sewer drainage basins. Many of the pump stations were installed to serve individual developments. The City is in the process of developing a philosophy that would ultimately strive to serve as many areas as possible by gravity but would allow pump stations or grinder pumps for individual developments in a case by case basis.

# **CITY OF CHEHALIS**

The City of Chehalis provides sewer service within the corporate boundaries as well as several miles south. The City of Napavine and Lewis County Water-Sewer District No. 4 are served by the Chehalis wastewater treatment plant which is jointly owned by all three jurisdictions. Sewage from those jurisdictions is conveyed to the plant through a shared interceptor sewer system. The collection system conveys flows to the city's treatment plant which provides both primary and secondary treatment. The plant was built in 1949 and has been expanded and upgraded several times, most recently in 1986-1987. The existing treatment plant capacity is four MGD, although the capacities have been exceeded during storm events. The average daily treatment is 1.45 MGD.

### OTHER CITIES AND TOWNS

Each of the nine incorporated cities and towns in Lewis County are served by sanitary sewer service. Specific information has not been obtained for the sanitary sewer systems in Morton, Mossyrock, Napavine, Pe Ell, Toledo, Vader and Winlock.

The following districts are responsible for planning, development and financing of capital facilities necessary for sanitary sewer services provided according to state law and rules of the state departments of Ecology and Health. Additionally, district water service plans must be adopted by the County.

### LEWIS COUNTY WATER-SEWER DISTRICT No. 2 - ONALASKA

The unincorporated town of Onalaska has 149 sewer connections or 217 ERUs. The system is currently operating at 49,000 gallons per day, or 61% of the design flow. The water-sewer district recently extended a sewer line to the proposed Birchfield Fully Contained Community development on Middle Fork Rd.

# LEWIS COUNTY WATER-SEWER DISTRICT No. 3 - PACKWOOD

Lewis County Water-Sewer District #3 is investigating the possibility of providing sewer service to the town of Packwood but no firm plans or projects are being considered at this time.

## LEWIS COUNTY WATER-SEWER DISTRICT No. 4 – SOUTH CHEHALIS

Lewis County Water-Sewer District No. 4 is a small sewer district bounded by both Napavine and Chehalis. The district has approximately 200 connections of which about 95 percent are residential with the remaining including a golf course and a few small commercial facilities. Wastewater treatment is provided by the Chehalis Treatment Center.

# LEWIS COUNTY WATER-SEWER DISTRICT No. 6 – MOSSYROCK, MAYFIELD VILLAGE

Lewis County Water and Sewer District #6 provides sewer service to the Mayfield Village area with a current usage of 270 ERU's; 62 of which are permanent residences, 114 part-time residences, 85 unused, and 9 commercial. The average daily treatment is 12,800 gallons per day.

## There are no sewer system service areas in Eastern Lewis County

# **SOLID WASTE**

The Solid and Hazardous Waste Management Plan (SHWMP) was prepared for the Lewis County Solid Waste Utility and adopted in October 2008 to provide future direction for managing solid and moderate risk waste, including collection and handling, within Lewis County.

The SHWMP addresses solid waste and moderate risk waste management throughout Lewis County as a joint county and city plan. The incorporated areas chose to participate in the County's planning process through an interlocal agreement.

The SHWMP documents current waste management programs, evaluates future waste management needs, and outlines a 20-year program for managing solid waste in Lewis County. While the plan considers a 20-year planning horizon, detailed program development and implementation covers a 6-year planning period (2008 to 2013).

## SOLID WASTE COLLECTION, TRANSFER, EXPORT, AND DISPOSAL

Since April 1, 1994, Lewis County has collected, transferred, and exported municipal solid waste for disposal. Waste transfer is the process of consolidating small waste loads

into larger containers for more efficient and economical transport. Waste export refers to the intercounty movement of solid waste.

### SOLID WASTE COLLECTION

Solid waste collection in Lewis County is provided exclusively by private companies. These companies operate either under the regulations of the Washington Utilities and Transportation Commission (WUTC) or through contracts with the municipalities they serve.

The cities of Centralia, Chehalis, Morton, Napavine, and Vader contract with private refuse companies. Even though the cities of Toledo, Winlock, Mossyrock, and Pe Ell are incorporated, they have opted to allow the County's WUTC-designated certified hauler to pick up their refuse. Unincorporated Lewis County is also served by the certified hauler. The hauler delivers the waste to the two transfer stations

# **SOLID WASTE TRANSFER STATIONS**

Lewis County has transfer stations in Centralia and Morton. Solid waste is collected at the transfer stations, transferred to rail containers and transported to the intermodal facility in north Centralia. In addition to transferring solid waste, the transfer stations are drop-off collection points for recyclables and in Centralia for moderate risk wastes.

The drop box system was discontinued in 2009. Drop box sites near Onalaska, Packwood, Toledo, and Winlock were provided to serve residents and businesses that do not subscribe to refuse collection services and to dispose of large items that cannot be picked up curbside. All drop box sites are fenced and signed.

### SOLID WASTE EXPORT

Lewis County does not currently operate a landfill. The Centralia Landfill was closed in 1994. Waste loaded in rail containers at the two transfer stations is hauled by truck to an intermodal rail yard where it is loaded on trains bound for the Roosevelt Landfill located in eastern Washington near the town of Roosevelt in Klickitat County.

Lewis County does not plan to site or operate a municipal solid waste landfill in the County during the planning horizon of the SHWMP.

# **ELECTRICAL POWER**

# LEWIS COUNTY PUBLIC UTILITY DISTRICT (PUD)

Lewis County PUD serves all areas of Lewis County, except the City of Centralia. Lewis County PUD currently serves over 30,000 customers of which approximately 25,000 are

residential, 4,300 are commercial, 625 are public, and 80 are industrial. The most recent winter peak load for the PUD was 212 megawatts and the total energy load for 2007 was 980,870 megawatt-hours (112 average megawatts).

The PUD currently obtains substantially all of its power supply from the Bonneville Power Administration (BPA), however, beginning in 2012, the PUD will be required to meet load growth with higher cost BPA or alternative resources. In addition, the PUD is required to meet a portion of its power supply in 2012 from qualifying renewable resources. As a result the PUD is evaluating alternatives to meet future power supply requirements. The PUD has not identified any specific new resources that would be developed in Lewis County; however, the PUD will continue to evaluate all options including but not limited to; incremental hydroelectric applications as part of a Chehalis River Basin flood control plan, potential wind generation sites in the County, and biomass cogeneration facilities in coordination with large industrial customers.

The PUD's capital improvement program generally amounts to approximately \$5 million annually. These annual capital improvements include additions, improvements and rebuilds of the distribution and transmission systems. Approximately \$3 to \$4 million of the capital expenditure is for routine improvements and replacements and a major portion driven by new customer growth. The remaining \$1 to \$2 million involve larger extraordinary capital construction activities.

### CENTRALIA CITY LIGHT

Centralia City Light supplies power to approximately 10,000 customers in the City of Centralia and some adjacent areas, notably Cooks Hill, Seminary Hill, and Salzer Valley. Approximately 75 percent of the Utility's customers live within the Centralia corporate limits with the remaining 25 percent located in unincorporated areas. Puget Power serves all of Thurston County down to the County line, just north of Centralia. Centralia City Light currently produces about 30 percent of its power needs, with the remaining 70 percent purchased from Bonneville Power Administration (BPA). The Utility sold approximately 250 million Kwh in 2007. The Utility's system includes approximately 250 miles of distribution lines, 27 miles of transmission lines, and three substations located within Centralia. Two more substations are under construction and scheduled to be put into service in 2008 and 2009. A third substation is planned for 2010.

### NATURAL GAS

Puget Sound Energy (PSE) provides natural gas service to more than 538,000 customers in a five county, 2,600 square mile service area, including Chehalis, Centralia, Toledo and Winlock. Gas is purchased from regional suppliers, such as Northwest Pipeline Corporation. PSE currently has more than 4,600 residential, commercial and industrial customers in Lewis County. Utilizing the current distribution system, PSE has the capacity to supply approximately 8,500 customers in the county. The existing system

can be expanded to meet any future needs beyond the existing capacity to supply. Table 7.1 shows PSE's 1988, 1998 and expected 2008 customer base and total capacity, by city.

| Table 7.1 Puget Sound Energy Natural Service |                |                |                          |                |  |
|--|----------------|----------------|--------------------------|----------------|--|
| City   | 1988 Customers | 1998 Customers | Projected 2008 Customers | Total Capacity |  |
| Centralia                                    | 2,559          | 2,897          | 3,600                    | 4,500          |  |
| Chehalis                                     | 1,648          | 1,380          | 2,100                    | 3,300          |  |
| Toledo                                       | 123            | 137            | 375                      | 330            |  |
| Winlock                                      | 175            | 212            | 337                      | 375            |  |
| Total  | 4,505          | 4,626          | 6,412                    | 8,505          |  |

PSE operates the Jackson Prairie gas storage facility in Lewis County, under joint ownership with Spokane-based Avista Utilities and Utah-based Northwest Pipeline GP (the main natural gas transportation line serving the Northwest). The Jackson Prairie geologic anticline structure was identified and explored by Conoco Oil in 1958, though no oil or gas was found. In 1963, when the interstate pipeline was constructed, the Jackson Prairie field was established as a 3,200 acre natural gas storage facility. Wells inject and withdraw natural gas to and from underground reservoirs – the thick, porous sandstone layers of the anticline structure 1,000 to 3,000 feet below the surface - while most of the surface acreage is privately owned and used for timber production or livestock grazing.

Jackson Prairie allows PSE and other utilities to buy and store significant amounts of natural gas during lower-priced summer months and then tap the reserves in the winter when customers' natural gas requirements are highest. In late 2008, PSE completed a \$44 million expansion project to increase the amount of natural gas that can be withdrawn. Jackson Prairie can now deliver 1.15 billion cubic feet of natural gas per day, allowing PSE to serve 1.2 million households' peak-day wintertime demand, as well as meet up to 25% of the Pacific Northwest's peak natural gas demand on the coldest winter days.

Currently, Jackson Prairie can store 23 billion cubic feet of working natural gas. An ongoing expansion effort, scheduled for completion by 2012, will result in a storage capacity of 25 billion cubic feet of working gas. (Including the facility's capacity to store "cushion" natural gas, used to provide pressure in the reservoirs, the total storage capacity at Jackson Prairie in 2012 will be approximately 48 billion cubic feet.)

Northwest Pipeline Company provides natural gas service along its Ferndale to Portland pipeline. Olympic Pipeline right-of-way maps are available.

# **TELECOMMUNICATIONS**

The telecommunications industry is currently in the midst of tremendous advances in technology. Cellular and optical fiber technologies are transforming the way service is delivered. In addition, the physical barriers that separate data, video, and voice technologies are rapidly disappearing. New technology and new providers have entered the market at a rapid pace and have fostered a competitive industry. There are several local and national telecommunication companies that provide service to Lewis County residents. These providers are regulated by federal, state and local jurisdictions. The County coordinates provisions of these services through the development permitting process.

The projects listed in the table below are from the 2008 Cowlitz Lewis Consolidated Economic Development Strategy

**CLEDD Project List** 

| CLEDD Project List                        |  |   |   |  |
|---|--|---|---|--|
| <u>Project</u>                            | <u>Agency</u>                                      | <u>Budget</u>   | <u>Timeline</u>   | Performance Measurement  |
| Chehalis River Flood<br>Reduction Project | Lewis County                                       | Not determined at this time. Received \$2.5 million in state funding \$47.5 million from state and \$74 million from federal. | Not determined at this time.  | Number of residents and businesses assisted through mitigation efforts.                |
| South Lewis County<br>Interchange         | Lewis County                                       | \$1.2 million for Interchange Justification<br>Report and NEPA and \$40-\$60 million for<br>complete project.                 | 2009 for Winlock<br>Industrial Park<br>Interchange; 2011 for ILB<br>Site. | Service capacity increase for industrial development                                   |
| Workforce Training Centers                | Lewis County with Cities of Chehalis and Centralia | To be determined in feasibility study.  | Not determined at this time.  | Number of employees and employers served through center and retained businesses.       |
| Trans Alta Industrial Site                | Lewis County  Economic  Development  Council       | Phase I \$300,000; Phase II to be determined through completion of Phase I.   | 2009  | Number of industries and businesses brought to site, high skill high wage job creation |
| South Lewis County Airport Project        | <u>Lewis County</u>                                | \$100,000 for study   | September 2009  | Increased air traffic, employment, sales, and cargo. Residents and businesses who      |
| Dryad Water System                        | Lewis County                                       | \$1.5 million   | <u>2011</u>   | receive clean water through new plant.   |
| South Lewis County Subarea<br>Plan        | <u>Lewis County</u>                                | <u>\$750,000</u>  | <u>June 2009</u>  | Creation of family wage jobs   |
| State Route 505  Development Plan         | Lewis County                                       | <u>\$650,000</u>  | February 2009   | Regional economic development;<br>job creation, increased road<br>capacity and safety. |
| East Lewis County Wastewater Treatment    | Lewis County                                       | <u>\$6,213,600</u>  | August 2009   | New investment, businesses, and job creation.  |
| <b>Lewis County Trails Project</b>        | Lewis County                                       | To be determined.   |   | Increase in tourism, park use, and other local facility use                            |